USDA United States Department of Agriculture

Sidney Water Users Project Saves Water, Time, Money

What was a good idea nearly 50 years ago is still a good idea today – make irrigation water delivery to Montana's irrigation water users in Sidney, Mont., more efficient.

Jamie Selting, district conservationist for the USDA Natural Resources Conservation Service in Sidney, said this project is an example of how his agency provided technical assistance and a little bit of financial assistance to make big changes.

"We started with financial assistance for phase one, and the irrigators realized the benefits and decided to continue on," Selting said. "They used their own funds, as well as scratching up state and federal grants, to complete the remaining four phases."

The Sidney Water Users Project is a variety of canal improvements, pumps, and sediment retention structures designed to improve irrigation efficiency on 2,200 acres in northeastern Montana that grow spring wheat, barley, sugar beets, alfalfa, and corn.

Project Phases:

- Phase 1 included rebuilding existing pumps and installing the first sections of pipeline that would move irrigation conveyance from above ground, open canals to underground pipe.
- Phase 2 consisted of tying the mainline into a re-lift station to distribute irrigation water.
- Phase 3 replaced a leaky meandering canal to more efficiently deliver water in underground pipelines.
- Phase 4 extended the main line and tied in a pump to reuse tailwater.
- Phase 5 completed the final field delivery system to convey water to fields needing irrigation water.

For More Information

Contact the Sidney NRCS Field Office for more ifnormation about the Sidney Water Users Project.

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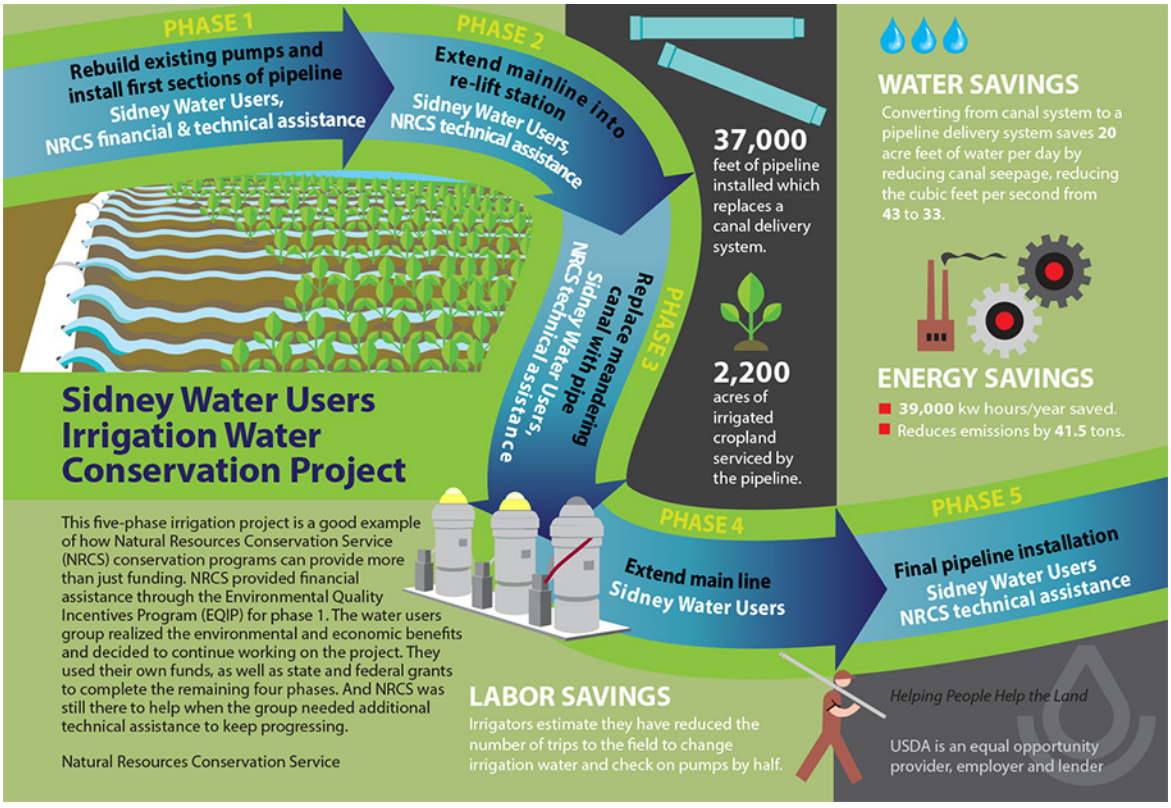

The project resulted in both environmental and economic benefits:

- Water Savings - The project included installation of 37,000 feet of pipeline to replace a canal delivery system. This conversion saves 20 acre feet of water per day by reducing canal seepage, reducing the rate of water pumped from 43 to 33 cubic feet per second.
- Labor Savings - Irrigators estimate they have reduced the number of trips to the field to change irrigation water and check on pumps by half.
- Energy Savings – The project saved 39,000 kw hours/year, reducing carbon emissions by 41.5 tons.

The Sidney Water Users project replaced an open canal water delivery system with a more efficient underground delivery system.

By installing 37,000 feet of pipeline to replace an open canal delivery system, the Sidney Water Users are saving 20 acre feet of water per day by reducing canal seepage.

"This is how conservation is supposed to work," Selting said. "Show producers the environmental and economic benefit and they will run with it. Sometimes they need a little technical assistance to keep progressing and that's what we're here for."

The five phase irrigation project replaced a leaky meandering canal to more efficiently deliver water in underground pipelines and extended the main line and tied in a pump to reuse tailwater.

Montana

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